Amendments to the Claims:

Please amend the claims as follows. Amend claims 17, 20, 42 and 44-54 and add new dependent claims 56-58. This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-16 (canceled)

Claim 17 (currently amended): A method for the inhibition of transmission of a hepatitis B virus to a cell, comprising contacting the virus, in the presence of the cell, with an effective concentration of a peptide having the formula:

~~X-PLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGGTTVCLGQNSQSP-Z;~~
X-PLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQNSQSP-Z;
X-PLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGT-Z;
X-LLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTT-Z;
X-LVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTTV-Z;
X-LQAGFFLLTRILTIPQSLDSWWTSLNGLGGTTVCL-Z;
X-QAGFFLLTRILTIPQSLDSWWTSLNFLGGTTVCLG-Z;
X-AGFFLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQ-Z;
X-GFFLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQN-Z;
X-FFLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQNS-Z;
X-FLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQNSQ-Z;
X-LLTRILTIPQSLDSWWTSLNFLGGTTVCLGQNSQS-Z;
~~X-PGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGCRTCMTT-Z;~~
X-PGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCMTT-Z;
X-PGYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGML-Z;
X-GYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLP-Z
X-YRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPV-Z;
X-RWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVC-Z;
X-WMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCP-Z;
X-MCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPI-Z;
X-CLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLI-Z;
X-LRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIP-Z;
X-RRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPG-Z;
X-RFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGS-Z;
~~X-FIIFLFILLLCLIFLLVLLDYQGMLPVCPLIGSS-Z;~~
X-FIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSS-Z;

X-IIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSST-Z;
~~X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTS-Z;~~
~~X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTST-Z;~~
~~X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTG-Z;~~
~~X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGP-Z;~~
~~X-ILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPC-Z;~~
~~X-LLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCR-Z;~~
~~X-LLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRT-Z;~~
~~X-LCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTC-Z;~~
~~X-CLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCM-Z;~~
~~X-LIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCMT-Z; or~~
~~X-IFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCMTT-Z;~~
X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTT-Z;
X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTS-Z;
X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTST-Z;
X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTG-Z;
X-ILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGP-Z;
X-LLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPC-Z;
X-LLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCR-Z;
X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRT-Z;
X-CLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTC-Z;
X-LIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCM-Z; or
X-IFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCMT-Z;

(SEQ ID NOS: 239-273, respectively)

in which:

amino acid residues are presented by the single-letter code;

X comprises an amino group, an acetyl group, a 9-fluorenylmethoxy-carbonyl group, a hydrophobic group, or a macromolecule carrier group;

Z comprises a carboxyl group, an amido group, a hydrophobic group, or a macromolecular carrier group for an effective period of time so that ~~no~~ infection of the cell by the virus ~~occurs~~ is inhibited.

Claims 18-19 (canceled)

Claim 20 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-PLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGGTTVCLGQNSQSP-Z~~

~~(SEQ ID NO: 239)~~

X-PLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQNSQSP-Z (SEQ ID NO: 239).

Claim 21 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-PLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGT-Z (SEQ ID NO: 240).

Claim 22 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTT-Z (SEQ ID NO: 241).

Claim 23 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTTV-Z (SEQ ID NO: 242).

Claim 24 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LQAGFFLLTRILTIPQSLDSWWTSLNGLGGTTVCL-Z (SEQ ID NO: 243).

Claims 25-32 (canceled)

Claim 33 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-GYRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLP-Z (SEQ ID NO: 252).

Claim 34 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-YRWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPV-Z (SEQ ID NO: 253).

Claim 35 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-RWMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVC-Z (SEQ ID NO: 254).

Claim 36 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-WMCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCP-Z (SEQ ID NO: 255).

Claim 37 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-MCLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPI-Z (SEQ ID NO: 256).

Claim 38 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-CLRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLI-Z (SEQ ID NO: 257).

Claim 39 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-LRRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIP-Z (SEQ ID NO: 258).

Claim 40 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-RRFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPG-Z (SEQ ID NO: 259).

Claim 41 (previously presented): The method of Claim 17 wherein the peptide has the formula

X-RFIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGS-Z (SEQ ID NO: 260).

Claim 42 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-FIIFLFILLLCLIFLLVLLDYQGMLPVCPLIGGSS-Z (SEQ ID NO: 261)~~
X-FIIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSS-Z (SEQ ID NO: 261).

Claim 43 (previously presented): The method of Claim 17 wherein the peptide has the formula
X-IIFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSST-Z (SEQ ID NO: 262).

Claim 44 (currently amended): The method of Claim 17 wherein the peptide has the formula
~~X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTS-Z (SEQ ID NO: 263)~~
X-IFLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTT-Z (SEQ ID NO: 263).

Claim 45 (currently amended): The method of Claim 17 wherein the peptide has the formula
~~X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTST-Z (SEQ ID NO: 264)~~
X-FLFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTS-Z (SEQ ID NO: 264).

Claim 46 (currently amended): The method of Claim 17 wherein the peptide has the formula
~~X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTG-Z (SEQ ID NO: 265)~~
X-LFILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTST-Z (SEQ ID NO: 265).

Claim 47 (currently amended): The method of Claim 17 wherein the peptide has the formula
~~X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGP-Z (SEQ ID NO: 266)~~
X-FILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTG-Z (SEQ ID NO: 266).

Claim 48 (currently amended): The method of Claim 17 wherein the peptide has the formula
~~X-ILLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPC-Z (SEQ ID NO: 267)~~

X-ILLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGP-Z (SEQ ID NO: 267).

Claim 49 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LLLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCR-Z (SEQ ID NO: 268)~~

X-LLLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPC-Z (SEQ ID NO: 268).

Claim 50 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LLCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRT-Z (SEQ ID NO: 269)~~

X-LLCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCR-Z (SEQ ID NO: 269).

Claim 51 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LCLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTC-Z (SEQ ID NO: 270)~~

X-LCLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRT-Z (SEQ ID NO: 270).

Claim 52 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-CLIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCM-Z (SEQ ID NO: 271)~~

X-CLIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTC-Z (SEQ ID NO: 271).

Claim 53 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-LIFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCMT-Z (SEQ ID NO: 272)~~

X-LIFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCM-Z (SEQ ID NO: 272).

Claim 54 (currently amended): The method of Claim 17 wherein the peptide has the formula

~~X-IFLLVLLDYQGMLPVCPLIPGSSTSTGPCRTCMTT-Z (SEQ ID NO: 273)~~

X-IFLLVLLDYQGMLPVCPLIPGSSTTSTGPCRTCMT-Z (SEQ ID NO: 273).

Claim 55 (previously presented): The method of Claim 17 wherein X is an acetyl group, and Z is an amido group.

Claim 56 (new) The method of Claim 17 wherein the peptide has at least one amino acid substitution, wherein a first amino acid residue is substituted for a second, different amino acid residue.

Claim 57 (new) The method of Claim 56, further wherein the amino acid substitution is a conserved substitution.

Claim 58 (new) The method of Claim 56, further wherein the amino acid substitution is a non-conserved substitution.